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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/552,147	04/19/2000	Abraham Korol	KOROL-I	3491
1444	7590	01/21/2004	EXAMINER	
BROWDY AND NEIMARK, P.L.L.C. 624 NINTH STREET, NW SUITE 300 WASHINGTON, DC 20001-5303			KUBELIK, ANNE R	
			ART UNIT	PAPER NUMBER
			1638	

DATE MAILED: 01/21/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/552,147

Applicant(s)

KOROL ET AL.

Examiner

Anne R. Kubelik

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 October 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,2,4,6,8,9,11-17 and 31-46 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-2, 4, 6, 8-9, 11-17 and 31-46 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ 6) ☐ Other: _____

DETAILED ACTION

1. Claims 1-2, 4, 6, 8-9, 11-17 and 31-46 are pending.
2. The amendment filed 30 October 2003 indicates that claims 41-46 are new. This is not the case; those claims were added in the amendment filed 30 July 2002.
3. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claim Objections

4. Claim 9 is objected to because of the misspelling "Trid" in line 2.
5. Claim 12 is objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. Parent claim 11 claims a method in which the selectable marker gene is either an antibiotic resistance gene or a herbicide resistance gene. Claim 12 is drawn to the method where the selectable marker gene is one regulating anthocyanin levels. Such genes are not antibiotic resistance genes or herbicide resistance genes.

Claim Rejections - 35 USC § 112

6. Claims 1-2, 4, 6, 8-9, 11-16, 41 and 43 remain rejected under 35 U.S.C. 112, first paragraph, because the specification, while being enabling for a silicon carbide/pollen-mediated method of transformation of maize, melon and tomato, does not reasonably provide enablement for use of that method in all sexually-reproducing plants. The specification does not enable any

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person skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention commensurate in scope with these claims. The rejection is repeated for the reasons of record as set forth in the Office action mailed 7 October 2002, as applied to claims 1-2, 4, 6, 8-9, 11-17, 41 and 43. Applicant's arguments and the Declaration of Professor Abraham Korol, filed 30 October 2003, have been fully considered but they are not persuasive.

Applicant's arguments filed 30 October 2003 have been fully considered but they are not persuasive. Applicant urges that the claims have been limited to maize, melon and tomato and that a new declaration with methods for transforming melon and tomato has been submitted (response pg 6).

This is not found persuasive because the methods are not limited to methods for transformation of maize, melon and tomato. The limitation in claim 1 is in the preamble only, which does not carry patentable weight. To limit the method to melon or tomato, --of melon or tomato plants-- should be inserted after "parts" in claim 1, part (g). Note that this will mean that claim 17, in which the plant is maize, will fail to properly limit claim 1.

7. Claims 1-2, 4, 6, 8-9, 11-17 and 31-46 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter that Applicant regards as the invention. Dependent claims are included in all rejections. The rejection is repeated for the reasons of record as set forth in the Office action mailed 7 October 2002. Applicant's arguments filed 30 October 2003 have been fully considered but they are not persuasive.

Applicant urges that the claims have been amended to correct the defects (response pg 6). This is not found persuasive because numerous new defects were introduced.

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In claims 1 and 31, part (h), "selection of" should be replaced with --selecting--.

Claim 11 is indefinite in its recitation of "the selection of transformants is performed growing the phenotypic expression of a specific cloned selectable marker gene" in lines 2-4. Words appear to be missing as the phrase makes no sense.

Claims 11 and 37, lines 5-6, are indefinite in their recitation of " expression being selected from the group consisting of both an antibiotic resistance gene and a herbicide resistance gene". Expression cannot be genes. Words appear to be missing from the claims.

Claim 17 lacks antecedent basis for the limitation "the flowering plant".

Claim 32 is indefinite in its recitation of "said silicon carbide fiber solution ... in length". A solution cannot be 01-20 μm in diameter and 1-250 μm in length.

Claim 36 lacks antecedent basis for the limitation "said solution of plasmid DNA".

Claim 37 is indefinite in its recitation of "the selection of transformants is performed by growing the phenotypic expression of a specific cloned selectable marker gene" in lines 2-4. Words appear to be missing as the phrase makes no sense. How can phenotypic expression be grown?

Claim 38 lacks antecedent basis for the limitation " said selectable marker".

Claims 45-46 lack antecedent basis for the limitation "said flowering plant".

8. The claims are free of the prior art, given the failure of the prior art to teach pollen mediated transformation of dicots using silicon carbide fibers and given the inherent unpredictability of pollen mediated transformation of dicots or gymnosperms.

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9. Claims 31-40, 42 and 44 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action.
10. Claim 17 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

Conclusion

11. No claim is allowed.
12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Anne R. Kubelik, whose telephone number is (571) 272-0801. The examiner can normally be reached Monday through Friday, 8:30 am - 5:00 pm.
- If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Amy Nelson, can be reached at (571) 272-0804. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.
- Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to Customer Service at (703) 308-0198.

Anne R. Kubelik, Ph.D.
January 5, 2004



AMY J. NELSON, PH.D.
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 1600